CLAIMS

1. A CO oxidation catalyst of ruthenium held on a carrier of titania and alumina.

2. A CO oxidation catalyst of ruthenium with an alkali metal and/or an alkaline earth metal held on a carrier of titania and alumina.

3. The CO oxidation catalyst as claimed in claim 1 or 2, wherein the weight ratio of titania to alumina falls between 0.1/99.9 and 90/10.

4. The CO oxidation catalyst as claimed in claim 2 or 3, wherein the alkali metal is at least one selected from potassium, cesium, rubidium, sodium and lithium.

5. The CO oxidation catalyst as claimed in any of claims 2 to 4, wherein the alkaline earth metal is at least one selected from barium, calcium, magnesium and strontium.

6. A method for producing a CO oxidation catalyst of ruthenium with an alkali metal and/or an alkaline earth metal held on a carrier of titania and alumina, which comprises applying a solution of ruthenium and a solution of an alkali metal and/or an alkaline earth metal to the carrier.

7. The method for producing a CO oxidation catalyst as claimed in claim 6, wherein a mixed solution of ruthenium and an alkali metal and/or an alkaline earth metal is applied to the carrier.

8. A method for producing a CO-reduced, hydrogen-

containing gas, which comprises selectively oxidizing carbon monoxide in a gas of essentially hydrogen, with oxygen in the presence of the catalyst of any of claims 1 to 5 or the catalyst produced in the process of claim 6 or 7.

9. The method for producing a hydrogen-containing gas as claimed in claim 8, wherein the gas of essentially hydrogen is obtained by reforming or partially oxidizing a hydrogen-producing starting material.

10. The method for producing a hydrogen-containing gas as claimed in claim 8 or 9, wherein the hydrogen-containing gas produced is for fuel cells.